



PORTABLE
ELECTRIC
TOOLS
1939



HELPING GOOD MECHANICS DO BETTER WORK

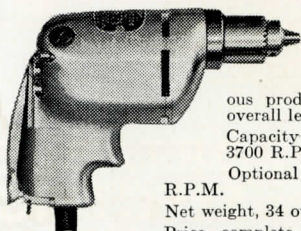
THE NUTMEG AUTO SUPPLY CO.

159 Park Street

Hartford

Conn.

NEW 3/16" HORNET DRILL



A sensational drill, developed for aircraft and lighter industrial work. Extremely compact, light in weight, with high speed and stamina for continuous production service. Note short overall length, grip-type switch.

Capacity in steel, $\frac{3}{16}$ "; No-load Speed, 3700 R.P.M.

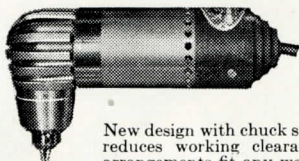
Optional Speed (no extra cost)—5200 R.P.M.

Net weight, 34 ounces; overall length, 6".

Price, complete, for all voltages—(Code No. 354).....

\$38.00

Available for 110, 220 or 250 volts. Universal Motor.



SHORTY ELECTRIC DRILL

New design with chuck spindle at right angles to motor, reduces working clearance to $4\frac{1}{2}$ ". Three switch arrangements fit any working needs.

3/16" SHORTY DRILL

—No-load Speed 3700 or 5000 R.P.M.

—With Switch-in-line (Code 25)—Price, complete.....**\$38.00**

Net weight, $3\frac{1}{2}$ lbs.; overall length * $7\frac{3}{4}$ "

—With Paddle Switch (Code 286)—Price, complete.....**\$41.00**

Net weight, $3\frac{1}{8}$ lbs.; overall length * $8\frac{3}{4}$ "

—With Toggle Switch (Code 297)—Price, complete.....**\$41.00**

Net weight, $3\frac{3}{4}$ lbs.; overall length * $8\frac{3}{4}$ "

1/4" SHORTY DRILL

—No-load Speed, 2500 R.P.M.

—With Switch-in-line (Code 26)—Price, complete.....**\$35.00**

Net weight, $3\frac{1}{2}$ lbs.; overall length * $7\frac{3}{4}$ "

—With Paddle Switch (Code 287)—Price, complete.....**\$38.00**

Net weight, $3\frac{1}{8}$ lbs.; overall length * $8\frac{3}{4}$ "

—With Toggle Switch (Code 298)—Price, complete.....**\$38.00**

Net weight, $3\frac{3}{4}$ lbs.; overall length * $8\frac{3}{4}$ "

*Indicates length in direction of motor. Overall length in direction of chuck, $4\frac{1}{2}$ ".

Available for 110, 220 or 250 volts. Universal Motor.

THE NEW 1/4" HOLGUN



CHECK THESE OUTSTANDING HOLGUN FEATURES

New advanced design, smooth housings, hand-fitting grip.
Perfect proportions, perfect balance, perfect trigger switch control.
Compactness with no sacrifice in power.
Anti-friction bearings throughout.
Full-size gears, with splined gear-mounting on chuck spindle for greater strength, less noise, friction and wear.
Ample ventilation, with three large screened inlets, any two of which insure cool operation.
Two-pole switch with unit assembly of switch, locking pin, cord protector and cable to facilitate inspection.
Simplicity of assembly aids easy inspection and servicing of any part of the unit.
Powerful Universal motor, which operates on either A.C. or D.C.
A heavy-duty production tool of small size and unusual adaptability.

1/4" HOLGUN

Capacity in steel, 1/4"
No-Load Speed, 1700 R.P.M. *
Weights: Net, 2 3/4 lbs.; Shipping, 4 1/4 lbs.
Overall length, 6 3/4"
Spindle Offset, 3/4"
Equipment: 2-pole instant release switch and locking pin; 3-wire cable and plug; 3-jaw Jacobs chuck and key; Universal motor, operating on A.C. or D.C.
Standard Voltage, 110; also available for 220 or 250 volts.
*Optional Speeds (no extra cost)—2500, 3500 or 5000 R.P.M.
Price, complete—(Code No. 345).....**\$32.50**

1/4" LOW SPEED HOLGUN

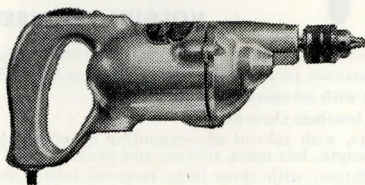
Reduced spindle speed and increased torque are ideal for stainless steel, monel and other hard metals. Eliminates bit burning and breakage.
No-Load Speed, 500 R.P.M.
Optional Speeds (no extra cost)—750 or 1000 R.P.M.
Weights: Net, 3 lbs.; Shipping, 4 1/4 lbs.
Overall length, 7 1/8".
Price, complete—(Code No. 346).....**\$38.00**
(Other specifications same as Std. HOLGUN)

JUNIOR ELECTRIC DRILLS

"Quality Drills in the Low Price Field"

Practical, handy drills, in the two most popular sizes, built to strict quality specifications, but priced within reach of every shop or mechanic that needs an "all 'round" drill. Features of these Junior Drills include full-power universal motor; instant-release safety switch; "Compo" oil-less bearings to insure long wear and prevent dry bearings; 3-wire cable and plug (3rd wire for grounding); Jacobs geared chuck and key.

1/4" JUNIOR DRILL



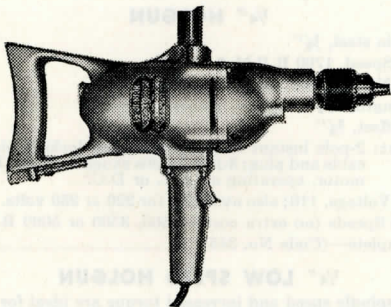
Ideal for tool kits and "odd-job" service, in plumbing, auto repair, electrical and carpentry work.

Capacity in steel, 1/4"; No-load Speed, 1800 R.P.M.

Net weight, 3 7/8 lbs.; overall length, 12"

Price, complete, for all voltages—(Code No. 30).....**\$19.95**

1/2" JUNIOR DRILL



Correct spindle speed for driving Hole Saws, wood augers, carbon bits and accessories, and for general purpose drilling.

Capacity in steel, 1/2"; No-load Speed, 375 R.P.M.

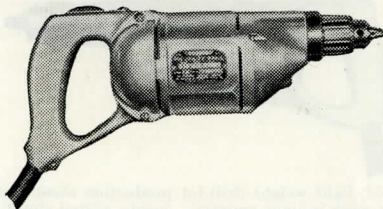
Net weight, 9 3/8 lbs.; overall length, 16 1/2"

Price, complete, for all voltages—(Code No. 38).....**\$35.00**

Junior Drills available for 32, 110, 220 or 250 volts.

See also Junior Bench Grinder, (Page 20), and Junior Sander (Page 24).

NEW 5/16" UTILITY DRILL



The "plus value" of added chuck capacity recommends this drill for general service shop and maintenance work. Spindle speed ideal for utility service, carbon bits, accessories, etc. Jacobs geared chuck and key.

Capacity in steel, $\frac{5}{16}$ "; No-load Speed, 1100 R.P.M.

Net weight, $6\frac{1}{4}$ lbs.; overall length, 13"

Price, complete, for all voltages—(Code No. 351).....**\$36.00**

Available for 32, 110, 220 or 250 volts. Universal Motor.

1/4" HEAVY DUTY DRILL

A sturdy drill for constant service on production, heavy duty maintenance and carbon cleaning work. Portomatic keyless chuck and gear locking pin.

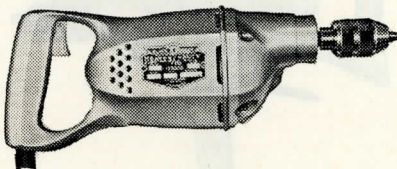
Capacity in steel, $\frac{1}{4}$ "; No-load Speed, 2000 R.P.M.

Net weight, $7\frac{3}{4}$ lbs.; overall length, $14\frac{1}{2}$ "

Price, complete, for all voltages—(Code No. 33).....**\$45.00**

Available for 32, 110, 220 or 250 volts. Universal Motor.

5/16" HEAVY DUTY DRILL



For industrial production service on cabinet and body assembly, and lead-hole drilling on screw-driver operations. Equipped with Portomatic keyless chuck and gear locking pin.

Capacity in steel, $\frac{5}{16}$ "; No-load Speed, 1400 R.P.M.

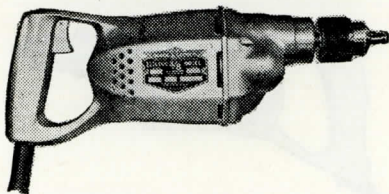
Net weight, $7\frac{3}{4}$ lbs.; overall length, $14\frac{1}{2}$ "

Price, complete, for all voltages—(Code No. 35).....**\$50.00**

Special Speed: 900 R.P.M.**\$2.50 extra**

Available for 32, 110, 220 or 250 volts. Universal Motor.

$\frac{3}{8}$ " UTILITY DRILL



A high-speed, light weight drill for production sheet metal, body and cabinet work in light material. Jacobs geared chuck and key. Capacity in steel, $\frac{3}{8}$ "; No-load Speed, 900 R.P.M.

Net weight, 8 lbs.; overall length, $14\frac{3}{4}$ "

Price, complete, for all voltages—(Code No. 36).....**\$53.00**

Available for 32, 110, 220 or 250 volts. Universal Motor.

$\frac{3}{8}$ " HEAVY DUTY DRILL

For plants doing production drilling of $\frac{3}{8}$ " holes at high speed. Design same as $\frac{1}{2}$ " Special, shown below. Jacobs geared chuck and key.

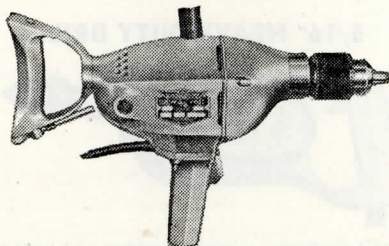
Capacity in steel, $\frac{3}{8}$ "; No-load Speed, 900 R.P.M.

Net weight, $12\frac{3}{4}$ lbs.; overall length, $16\frac{3}{4}$ "

Price, complete, for all voltages—(Code No. 37).....**\$57.00**

Available for 32, 100, 220 or 250 volts. Universal Motor.

$\frac{1}{2}$ " SPECIAL DRILL



The most popular general purpose drill of the Black & Decker line. Perfect balance, light weight, ample power. Jacobs geared chuck and key.

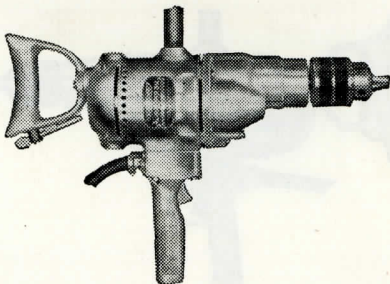
Capacity in steel, $\frac{1}{2}$ "; No-load Speed, 400 R.P.M.

Net weight, $13\frac{1}{4}$ lbs.; overall length, $17\frac{1}{4}$ "

Price, complete, for all voltages—(Code No. 39).....**\$58.00**

Available for 32, 110, 220 or 250 volts. Universal Motor.

THE UTILITY POWER DRILL LINE



A popular-price line of large size drills, delivering heavy duty performance to shops that want the combination of "production" power and "service tool" utility. Correct spindle speed for carbon bits, augers, Hole Saws, cylinder hones, hard metals. Heavy-Duty bearing construction, ample power, light weight.

5/8" UTILITY POWER DRILL

For garages, body shops, maintenance crews and general service shop work. Jacobs geared chuck and key.

Capacity in steel, 5/8"; No-load Speed, 300 R.P.M.

Net weight, 17 lbs.; overall length, 18"

Optional—No. 2 Morse Taper Socket instead of chuck.

Price, complete, for all voltages—(Code No. 238).....**\$60.00**

Available for 32, 110, 220 or 250 volts. Universal Motor.

3/4" UTILITY POWER DRILL

(Illustrated)—For Hole Saws, wood augers, cylinder hones; contractors, repair shops. Jacobs geared chuck and key.

Capacity in steel, 3/4"; No-load Speed, 250 R.P.M.

Net weight, 19 1/4 lbs.; overall length, 18 3/4"

Optional—No. 2 or No. 3 Morse Taper Socket instead of chuck.

Price, complete, for all voltages—(Code No. 239).....**\$68.00**

Available for 110, 220 or 250 volts. Universal Motor.

7/8" UTILITY POWER DRILL

Exceptionally high torque and low spindle speed adapt this drill to general shop work, railway repair, ship yards and maintenance.

Equipped with No. 3 Morse Taper extended spindle.

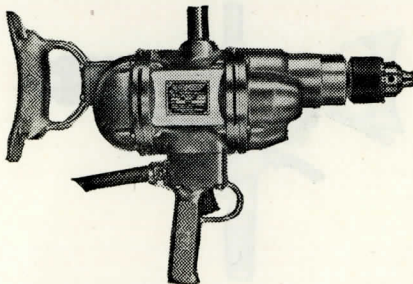
Capacity in steel, 7/8"; No-load Speed, 200 R.P.M.

Net weight, 17 3/4 lbs.; overall length, 19 1/4"

Price, complete, for all voltages—(Code No. 240).....**\$73.00**

Available for 110, 220 or 250 volts. Universal Motor.

HEAVY DUTY DRILL LINE



Designed throughout for severe use. Ample power, ball bearings, with double ball bearings or Timken roller bearings on spindle; sturdy housings; rugged gears, pinions and spindles.

1/2" HEAVY DUTY DRILL

Equipped with double ball spindle bearing, Jacobs geared chuck and key.

Capacity in steel, 1/2"; No-load Speed, 500 R.P.M.

Net weight, 16 1/2 lbs.; overall length, 18 1/2"

Optional—No. 1 or 2 Morse Taper Socket instead of chuck.

Price, complete, for all voltages—(Code No. 40).....**\$68.00**

Special Speeds: 600 or 750 R.P.M.....\$5.00 extra

5/8" HEAVY DUTY DRILL

(Illustrated)

Equipped with roller spindle bearing, Jacobs geared chuck and key.

Capacity in steel, 5/8"; No-load Speed, 450 R.P.M.

Net weight, 22 1/2 lbs.; overall length, 20 1/4"

Optional—No. 2 Morse Taper Socket instead of chuck.

Price, complete, for all voltages—(Code No. 42).....**\$83.00**

Available for 110, 220 or 250 volts. Universal Motor.

3/4" HEAVY DUTY DRILL

Taper-roller spindle bearing, extra long switch handle and pipe handle, special safety switch, Jacobs geared chuck and key.

Capacity in steel, 3/4"; No-load Speed, 375 R.P.M.

Net weight, 27 1/2 lbs.; overall length, 21"

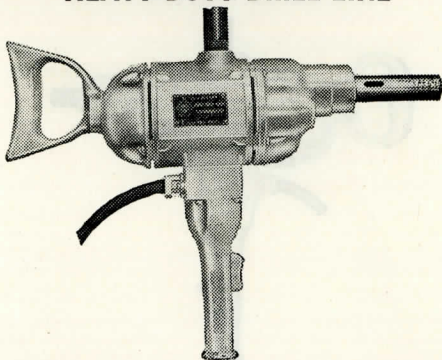
Optional—Nos. 2 or 3 Morse Taper Socket instead of chuck.

Price, complete, for all voltages—(Code No. 45).....**\$94.00**

Special Speeds: 275, 600 or 900 R.P.M.....\$5.00 extra

Available for 110, 220 or 250 volts. Universal Motor.

HEAVY DUTY DRILL LINE



These large capacity drills are equipped with Morse taper sockets, of either extended or internal type, extra long switch handles with special safety switches and long pipe handles for perfect control.

7/8" HEAVY DUTY DRILL

Equipped with taper-roller spindle bearing, No. 3 Morse taper socket.

Capacity in steel, $\frac{7}{8}$ "; light reaming, $\frac{5}{8}$ "

Heavy reaming, $\frac{1}{2}$ "; No-load Speed, 375 R.P.M.

Net weight, $24\frac{3}{4}$ lbs.; overall length, $21\frac{3}{4}$ "

Price: Extended Spindle, complete—(Code No. 46).....**\$98.00**

Internal Spindle, complete—(Code No. 302).....**\$103.00**

Special Speeds—275 or 600 R.P.M.....\$5.00 extra

Available for 110, 220 or 250 volts. Universal Motor.

1" HEAVY DUTY DRILL

(Illustrated)

Taper-roller spindle bearing, No. 3 Morse taper spindle.

Drilling in steel, 1"; light reaming, $\frac{3}{4}$ "

Heavy reaming, $\frac{5}{8}$ "; No-load Speed, 350 R.P.M.

Net weight, $27\frac{3}{4}$ lbs.; overall length $21\frac{3}{4}$ "

Price: Extended Spindle, complete—(Code No. 301).....**\$110.00**

Internal Spindle, complete—(Code No. 47).....**\$115.00**

Special Speeds—250 or 600 R.P.M.....\$5.00 extra

Available for 110, 220 or 250 volts. Universal Motor.

No. 8 HEAVY DUTY DRILL

The most powerful drill in the Black & Decker line. Equipped with No. 4 Morse taper socket.

Drilling in steel, $1\frac{1}{2}$ "; light reaming, $1\frac{1}{8}$ "

Heavy reaming, $\frac{7}{8}$ "; No-load Speed, 350 R.P.M.

Net weight, 66 lbs.; overall length, $24\frac{1}{2}$ "

Optional Equipment—No. 3 instead of No. 4 Morse taper socket.

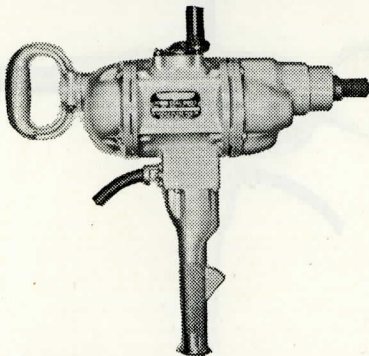
Price, complete for all voltages—(Code No. 48).....**\$250.00**

Special Speeds: 500 or 700 R.P.M.....\$5.00 extra

250 R.P.M.....\$15.00 extra

Available for 110, 220 or 250 volts. Universal Motor.

COAL DRILLS



Light weight, rugged construction, Timken taper-roller bearings on spindle, dust-proof instant release switch, choice of spindle speeds, choice of breast plate or spade handle, 1" diameter spindle, 8 thread right hand, for standard adaptors. No adaptors supplied.

No. 25 COAL DRILL

Inexpensive drill for intermittent 1-man use; for contract operations.

No-load spindle Speed, 200 R.P.M.

Net weight, 19 lbs.; overall length, 15"

Price, complete, for all voltages—(Code No. 303).....**\$95.00**

No. 125 COAL DRILL

For regular service in free-drilling coal and for close quarters.

Optional No-load Speeds—350 or 600 R.P.M.

Net weight, 26 ½ lbs; overall length, 17 ½"

Price, complete, for all voltages—(Code No. 304).....**\$120.00**

No. 225 COAL DRILL

(Illustrated)

Most popular size for constant service. Suited to 1-man or 2-man use.

Optional No-load Speeds—350 or 600 R.P.M.

Net weight, 27 ½ lbs.; overall length, 17 ½"

Price, complete, for all voltages—(Code No. 305).....**\$135.00**

No. 325 COAL DRILL

Extra heavy duty, for 2-man operation. Suited to feed-bar mounting.

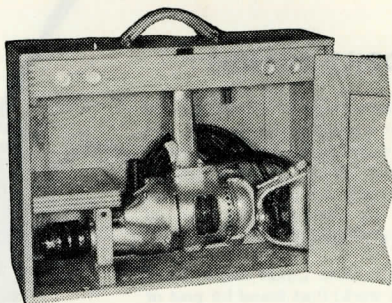
No-load spindle Speed, 250 R.P.M.

Net weight, 64 lbs.; overall length, 26 ½"

Price, complete, for all voltages—(Code No. 307).....**\$265.00**

All Coal Drills available for alternating or direct current and for 110, 220 or 250 volts.

LECTRO TOOL CHESTS



Complete, compact portable kits for taking drills and accessories "on the job"; for electricians, plumbers, installation crews, maintenance departments.

Chest is made of heavy oak, machinist tool box design with removable door and carrying handle. Definite space provided for Drill, Hole Saws, drill bits, augers, wrenches, screw drivers and other small tools. (Electric Drill, Hole Saws and Mandrels only are supplied with Lectro Tool Chests. Drill bits, augers and other items can be bought from jobber.)

Complete Lectro Tool Chest contains the following equipment:

1 Paneled Oak Tool Chest

1 Electric Drill (as below)

7 Hole Saws: No. 14908, $\frac{7}{8}$ "; No. 14912, $1\frac{1}{8}$ "; No. 14913, $1\frac{3}{8}$ "; No. 14914, $1\frac{1}{2}$ "; No. 14916, $1\frac{3}{4}$ "; No. 14918, 2"; No. 14922, $2\frac{1}{4}$ "

2 Hole Saw Mandrels: No. 14903 and No. 14904

(No other accessories furnished).

No. 332 Lectro Tool Chest, equipped as above with $\frac{5}{8}$ " Utility Power Drill. (Net weight, 34 lbs.)

Price, complete, for all voltages—(Code No. 332).....**\$78.00**

No. 333 Lectro Tool Chest, equipped as above with $\frac{1}{2}$ " Junior Drill. (Net weight, 27 lbs.)

Price, complete, for all voltages—(Code No. 333).....**\$53.00**

No. 334 Lectro Tool Chest, equipped as above with $\frac{1}{2}$ " Special Drill. (Net weight, $31\frac{1}{4}$ lbs.)

Price, complete, for all voltages—(Code No. 334).....**\$76.00**

No. 335 Tool Chest only, with drawer and partitions, minus equipment; $16\frac{1}{2}$ " high; 20" long; 8" deep; $15\frac{3}{4}$ lbs. net.

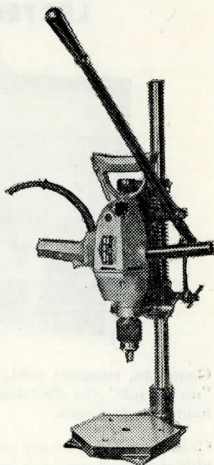
Price, Tool Chest only—(Code No. 335).....**\$10.00**

Available for 32, 110, 220 or 250 volts. Universal Motors.

DRILL STANDS

Quickly convert portable drills to drill press operations; for heavy duty and accurate work. Handle leverage permits tremendous pressure; bracket adjustable for height and lateral position; one bracket fits several tools and no adaptors are required.

Available in three types: Bench Stand for bench work; Post Stand for post or column mounting; Pedestal Stand for floor.



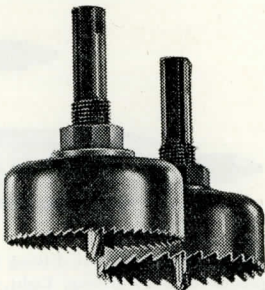
	Fits These Units	Bench Stand		Post Stand		Pedestal Stand	
		Code	Price	Code	Price	Code	Price
No. 20 Stand	1/4" Junior 1/4" Special 1/4" H.D. 5/16" Utility 5/16" H.D. 3/8" Utility #12 Sc. Dr.	119	\$14.00	120	\$18.00		
No. 22 Stand	No. 22 Tapper #22 Sc. Dr.	121	16.00	197	20.00		
No. 40 Stand	3/8" H.D. 1/2" Junior 1/2" Special	122	22.00	123	26.00	124	28.00
No. 60 Stand	1/2" H.D. 5/8" Utility 5/8" H.D. 3/4" Utility 3/4" H.D. 7/8" Utility 7/8" H.D. 1" H.D.	125	32.00	126	36.00	127	36.00

No. 60 Stand also fits drills listed under No. 40 Stand except 1/2" Junior; recommended where these are used with larger drills. Other Stands fit only the drills indicated.

HOLE SAWS

For Use with 1/2", 5/8" and 3/4" Electric Drills

Cut clean, round holes in steel, cast iron, sheet metal, wood or any material a hack saw will cut. Mandrel fits 1/2" or larger drill chuck and holds 1/4" twist drill which cuts pilot hole and centers Hole Saw. All types of Hole Saws are interchangeable on proper size mandrel. Available in three types: fine-tooth for sheet metal, steel and all thin materials; coarse-tooth for cast iron, wood, fibre and all thick materials; both of highest quality tungsten steel, and a new HIGH-SPEED Hole Saw for hard alloys and production work.



HOLE SAW SPECIFICATIONS

Saw Size Outside Diam.	Fine-Tooth Saw Cat. No.	Coarse-Tooth Saw Cat. No.	Price Each (Saw only without Mandrel)	High Speed Saw	
				Cat. No.	Price
3/4"	16882†	14906†	\$.65	21747†	\$1.50
7/8"	16883†	14908†	.65	21748†	1.50
15/16"	21382†		.65	21749†	1.50
1"	16884†	14910†	.65	21771†	1.50
1 1/8"	16885†	14912†	.85	21772†	1.50
1 3/16"	17678*	17679*	.85	21773*	1.50
1 1/4"	16886*	14911*	.85	21781*	1.50
1 3/8"	16887*	14913*	.85	21782*	1.50
1 1/2"	16888*	14914*	.85	21783*	1.50
1 5/8"	16889*	14915*	1.00	21784*	1.50
1 3/4"	16890*	14916*	1.00	21785*	2.00
1 7/8"	16891*	14917*	1.00	21786*	2.00
2"	16892*	14918*	1.20	21787*	2.00
2 1/16"	16893†	14919†	1.20	21788†	2.65
2 1/8"	16894†	14920†	1.20	21789†	2.65
2 1/4"	16895†	14922†	1.40	21790†	2.65
2 3/8"	16896†	14921†	1.40	21791†	2.65
2 1/2"	16897†	14923†	1.40	21792†	2.65
2 5/8"	16898†	14924†	1.50	21793†	2.65
2 3/4"	16899†	14925†	1.50	21794†	2.65
2 7/8"	16900†	14927†	1.50	21795†	2.65
3"	16901†	14926†	1.65	21796†	2.65
3 1/8"	16902†	14930†	1.65	21797†	2.65
3 1/4"	16903†	14929†	1.65	21798†	2.65
3 1/2"	16904†	14928†	1.65	21799†	2.65
4"	16905†	14932†	2.00	21800†	4.50

†14903 Mandrel with pilot drill (for 3/4" to 1 1/8" Saws).....\$1.65

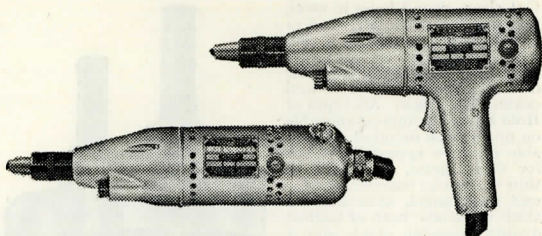
*14904 Mandrel with pilot drill (for 1 3/16" to 2" Saws)..... 1.65

†18028 Mandrel with pilot drill (for 2 1/16" to 4" Saws)..... 2.50

14935 1/4" Pilot drill only. fits all size mandrels..... .35

TORSIMETERS

Adjustable Clutch Screwdrivers



Pre-adjusted to correct driving torsion; insure uniform results in production screw driving. Light, compact tools for small trim work, cabinet and airplane assembly. Several handle and switch arrangements meet various production requirements.

No. 3 TORSIMETER

Specially adapted to self-threading screws in light metal.

Quick-change chuck, $\frac{1}{4}$ " hex. socket.

Capacity—Up to No. 4 Screws; No-load Speed, 1000 R.P.M.

No. 3 Torsimeter with bonnet grip—(Code No. 49).....**\$52.00**
Net weight, $2\frac{3}{4}$ lbs.; overall length, $11\frac{1}{2}$ "

No. 3 Torsimeter with paddle switch—(Code No. 244).....**\$55.00**
Net weight, 3 lbs.; overall length, $11\frac{1}{2}$ "

No. 31 TORSIMETER

Capacity—Up to No. 8 Screws; No-load Speed, 750 R.P.M.

No. 31 Torsimeter with bonnet grip—(Code No. 51).....**\$57.00**
Net weight, $4\frac{1}{2}$ lbs.; overall length, $12\frac{5}{8}$ "

No. 31 Torsimeter with paddle switch—(Code No. 242).....**\$60.00**
Net weight, 5 lbs.; overall length, $12\frac{5}{8}$ "

No. 31 Torsimeter with end handle—(Code No. 50).....**\$57.00**
Net weight, $4\frac{3}{4}$ lbs.; overall length, $11\frac{3}{4}$ "

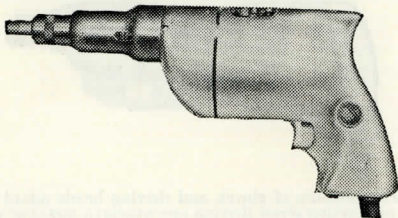
No. 31 Torsimeter with side handle—(Code No. 52).....**\$57.00**
Net weight, $4\frac{3}{4}$ lbs.; overall length, $10\frac{7}{8}$ "

Special Speed—1200 R.P.M.....\$2.50 extra

All Torsimeters available for 110, 220 or 250 volts. Universal Motors.

THE NEW SCRUGUN

Adjustable Clutch Screwdrivers



Extremely compact, highly versatile, surprisingly powerful; for production screwdriving in cabinet, trim, auto body and airplane assembly. Adjustable clutch covers wide size range in machine screws, wood screws and self-tapping screws. Pre-set torsion insures uniform results. Structural features same as HOLGUN.

Capacity of SCRUGUN: Wood Screws—Up to No. 10 x 2"

Self-tapping Screws—Up to No. 12

Machine Screws and Nuts—Up to $\frac{1}{4}$ " diam.

Standard spindle Speed—(no-load), 750 R.P.M.

Optional Speeds—(no extra cost), 500, 1000, 1500 R.P.M.

Equipped with quick-change chuck, $\frac{1}{4}$ " hex. socket.

No. 8 SINGLE CLUTCH SCRUGUN

Automatically drives every screw to uniform depth. Free spindle idles until bit "finds" screw slot.

Net weight, $3\frac{1}{2}$ lbs ; overall length, $9\frac{1}{2}$ "

Price, complete, for all voltages—(Code No. 347).....\$47.00

No. 8 DOUBLE CLUTCH SCRUGUN

Especially sensitive adjustable unit; double clutch "cushions" the torque and relieves operator of any twisting motion as screw is driven home. Clutch is adjusted to desired tension. Free spindle idles until operating pressure is applied.

Net weight, $3\frac{3}{4}$ lbs.; overall length, $10\frac{1}{4}$ "

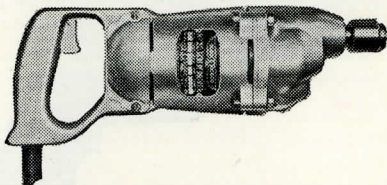
Price, complete, for all voltages—(Code No. 350).....\$57.00

Both Scruguns available for 110, 220 or 250 volts. Universal Motors.

An ideal companion tool is the HOLGUN, on Page 1.

No. 12 SCREW DRIVER AND WRENCH

Positive, Adjustable and Right Angle



Varied arrangements of clutch and driving heads adapt this unit to many production screw driving operations in metal or wood, nut tightening, boat building. Can be equipped with reversing switch for dis-assembling. Has $\frac{7}{16}$ " hex. socket chuck.

Capacity: Wood Screws, No. 14 x $2\frac{1}{2}$ "

Self-tapping Screws, $\frac{5}{16}$ " diam.

Lag Screws, $\frac{1}{4}$ " x 2"

Machine Screws and Nuts, $\frac{3}{8}$ " diam.

Standard No-load Speed, 500 R.P.M.

No. 12 POSITIVE CLUTCH DRIVER

(Illustration above)

Pin-type clutch permits spindle to idle until bit finds screw slot. Throws out when operating pressure is released.

Net weight, $6\frac{3}{4}$ lbs.; overall length, $13\frac{1}{4}$ "

Price, complete, for all voltages—(Code No. 53).....\$58.00

Special Speeds—750, 1000 or 1600 R.P.M.....\$2.50 extra

No. 12 ADJUSTABLE CLUTCH DRIVER

(Illustration, opposite page)

Adjustable clutch adapts driving torque to specific operation, insuring uniform results. Spindle idles until operating pressure is applied.

Net weight, 8 lbs.; overall length, $15\frac{1}{2}$ "

Price, complete, for all voltages—(Code No. 169).....\$68.00

Special Speeds—750, 1000 or 1600 R.P.M.....\$2.50 extra

No. 12 RIGHT ANGLE ADJUSTABLE DRIVER

(Illustration below)

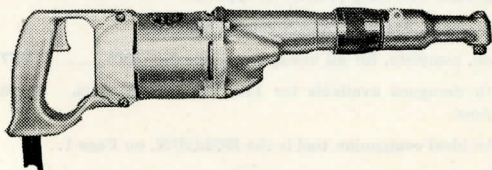
Several right angle heads with various shanks or sockets, and adjustable clutch feature adapt this unit to many special assembly operations in hard-to-reach places. See master catalog for available heads, and code numbers.

Net weight, $11\frac{1}{2}$ lbs.; overall length, $19\frac{3}{4}$ "

Price, complete, for all voltages with one head.....\$95.00

Special Speeds—350 or 700 R.P.M.....\$2.50 extra

All units available for 32, 110, 220 or 250 volts. Universal Motors.



No. 22 SCREW DRIVER AND WRENCH

Positive, Adjustable and Right Angle

Capable of constant production work in wood or metal, nut tightening, railway car building, body work, boat building, assembly and crating. Available with positive or adjustable clutch. Has quick-change chuck with $\frac{7}{16}$ " hex. socket. Can be equipped with reversing switch.

Capacity: Wood Screws, No. 18 x $3\frac{1}{2}$ "

Self-tapping Screws, $\frac{3}{8}$ " diam.

Lag Screws, $\frac{5}{16}$ " x 3"

Machine Screws and Nuts, $\frac{1}{2}$ " diam.

Standard No-load Speed, 500 R.P.M. (See Special Speeds below).

No. 22 POSITIVE CLUTCH DRIVER

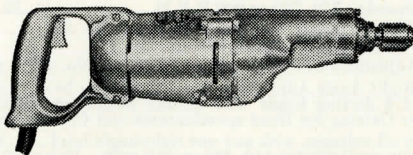
(Illustration opposite page)

Positive clutch permits spindle to idle until operating pressure engages clutch jaws. Kicks out when pressure is released.

Net weight, 9 lbs.; overall length, $14\frac{1}{4}$ "

Price, complete, for all voltages—(Code No. 54).....**\$72.00**

Special Speeds—750, 1000 or 1600 R.P.M.....\$2.50 extra



No. 22 ADJUSTABLE CLUTCH DRIVER

(Illustration above)

Selectivity of adjustable clutch and power of this unit idea for tough production work. Clutch automatically releases each screw at uniform depth. Spindle idles until pressure is applied.

Net weight, 11 lbs.; overall length, $17\frac{1}{8}$ "

Price, complete, for all voltages—(Code No. 164).....**\$85.00**

Special Speeds—750, 1000 or 1600 R.P.M.....\$2.50 extra

No. 22 RIGHT ANGLE ADJUSTABLE DRIVER

(Illustration opposite page)

Limited clearance, corner work and other obstacles to production screw driving and nut running are overcome by the various right angle heads and adjustable clutch. Seven interchangeable heads, with various shanks or sockets. See Master Catalog for Head Specifications and Code Numbers.

Net weight, 14 lbs.; overall length, $20\frac{1}{4}$ "

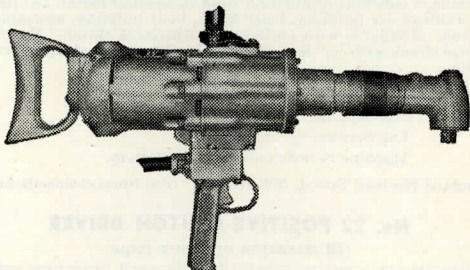
Price, for all voltages, with one right-angle head.....**\$110.00**

Special Speeds—350 or 700 R.P.M.....\$2.50 extra

All units available for 32, 110, 220 or 250 volts. Universal Motors.

No. 32 ELECTRIC NUT RUNNER

Positive, Adjustable and Right Angle



For heavy duty screw driving and production assembly nut tightening. Has quick-change chuck with $\frac{1}{16}$ " hex socket. Can be equipped with reversing switch. End switch handle is optional at no extra cost.

Capacity: Machine Screws and Nuts— $\frac{5}{8}$ " diam.

Lag Screws—Up to $\frac{3}{8}$ " x $4\frac{1}{2}$ " long.

Standard No-load Speed, 500 R.P.M.

Special Speeds—350, 700 or 900 R.P.M. \$2.50 extra

No. 32 Positive Clutch Nut Runner—(Code No. 55) **\$94.00**

Net weight, $22\frac{1}{2}$ lbs.; overall length, $19\frac{1}{2}$ "

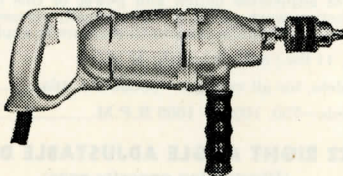
No. 32 Adjustable Clutch Nut Runner—(Code No. 352) **\$110.00**

No. 32 Right Angle Adjustable Nut Runner can be equipped with any of 4 driving heads with various shanks or sockets. See Master Catalog for Head specifications and Code Numbers.

Price, for all voltages, with any one right-angle head **\$150.00**

All units available for 110, 220 or 250 volts. Universal Motors.

No. 22 ELECTRIC TAPPER



For production tapping in metal with portable unit. Reversing mechanism automatically backs tap out of threaded hole. Reduces tap breakage. Equipped with $\frac{3}{8}$ " Jacobs chuck and key.

Capacity: $\frac{3}{8}$ " in cast iron; $\frac{1}{4}$ " in steel; $\frac{1}{2}$ " in brass or aluminum.

No-load Speed, 300 R.P.M.

Special Speeds—500, 700 or 1200 R.P.M. \$5.00 extra

Net weight, $10\frac{1}{2}$ lbs.; overall length, $15\frac{3}{4}$ "

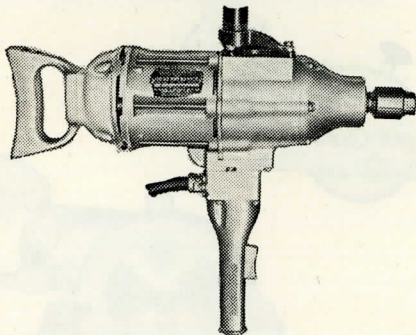
Price, complete, for all voltages—(Code No. 90) **\$85.00**

With special tap-holding chuck **\$90.00**

Available for 32, 110, 220 or 250 volts. Universal Motor.

No. 42 ELECTRIC NUT RUNNER

Positive, Adjustable and Right Angle



The most powerful unit for production assembly work. Equipped with quick-change chuck with $\frac{5}{8}$ " hex socket. Can be equipped with reversing switch. Right angle unit can be had with end switch handle instead of side switch and spade handle, no extra cost.

Capacity: Machine Screws and Nuts—Up to $\frac{7}{8}$ " diam.

Lag Screws—Up to $\frac{1}{2}$ " x $5\frac{1}{2}$ " long.

Standard No-load Speed, 500 R.P.M.

Special Speeds—350, 700 or 900 R.P.M.\$2.50 extra

No. 42 Positive Clutch Nut Runner—(Code No. 56).....**\$120.00**

Net weight, 35 lbs.; overall length, $21\frac{3}{4}$ "

No. 42 Adjustable Clutch Nut Runner—(Code No. 353)....**\$145.00**

No. 42 Right Angle Adjustable Nut Runner can be equipped with any of 6 driving heads, with various shanks or sockets. See Master Catalog for Head specifications, Code numbers and Prices.

Net weight, $52\frac{1}{2}$ lbs.; overall length, $28\frac{3}{4}$ "

All units available for 110, 220 or 250 volts. Universal Motors.

No. 43 ELECTRIC NUT RUNNER

A positive clutch driver with low spindle speed and exceptionally high torque. Can also be supplied with solid spindle and $\frac{3}{4}$ " chuck for heavy duty drilling and slow speed reaming.

Capacity: Lag Screws— $\frac{3}{4}$ " x 6"

Nuts and Bolts—1" diam.

No. load Speed, 90 R.P.M.

Special Speeds—175 or 275 R.P.M.\$5.00 extra

Net weight, $30\frac{3}{4}$ lbs.; overall length, $22\frac{3}{4}$ "

Price, with quick-change chuck,

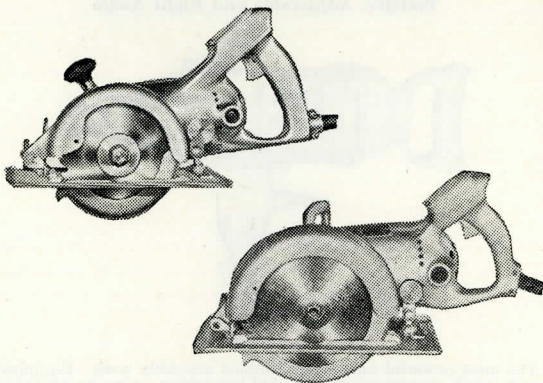
$\frac{5}{8}$ " hex socket—(Code No. 245).....**\$130.00**

Price, with solid spindle and

$\frac{3}{4}$ " Jacobs chuck and key.....**\$145.00**

Available for 110, 220 or 250 volts. Universal Motor.

PORTABLE ELECTRIC SAWS



Complete safety, adjustable depth of cut, adjustable angle; increased power, perfect balance, less weight, 2-pole instant release switch, sturdy gear and bearing construction; check these features of Black & Decker Saws.

No. 35 TRIM SAW

A light handy power saw for trim work and light crating.

Diam. Saw Blade, 5"; No-load Speed, 4200 R.P.M.

Max. vertical depth of cut, 1 $\frac{3}{8}$ "

Net weight, 11 $\frac{1}{4}$ lbs; overall length, 14"

Price, complete—(Code No. 285).....\$75.00

7-INCH PORTABLE SAW

The most widely useful size. Handles all popular lumber sizes.

Diam. Saw Blade, 7"; No-load Speed, 3200 R.P.M.

Max. vertical depth of cut, 2 $\frac{3}{8}$ "

Net weight, 18 $\frac{3}{4}$ lbs.; overall length, 17 $\frac{1}{2}$ "

Price, complete—(Code No. 260).....\$105.00

10-INCH PORTABLE SAW

A popular large-size unit for work requiring greater depth of cut.

Diam. Saw Blade, 10"; No-load Speed, 2000 R.P.M.

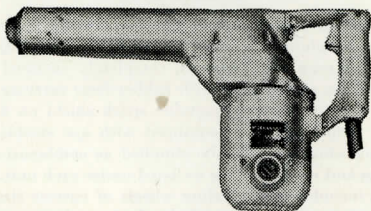
Max. vertical depth of cut, 3 $\frac{1}{2}$ "

Net weight, 33 $\frac{3}{4}$ lbs.; overall length, 28"

Price, complete—(Code No. 101).....\$180.00

Standard Equipment: 3-wire cable and plug, Combination Rip and Cross Cut Blade, carrying case. Universal Motors, operate on A.C. or D.C. Standard Voltage, 110; also available for 220 or 250 volts.

PORTABLE ELECTRIC HAMMERS



Completely self-contained units, requiring no rectifiers or transformers. Greatly speed up any drilling or cutting operations requiring a hammer action. The units are well balanced, compact and light in weight. The hammer action is developed by an oscillating weight and spring assembly, the weight driven indirectly by a crank. The action is characterized by a definite "follow-through" stroke, producing a high ratio of efficiency.

For drilling and channeling in concrete, stone or brick; cleaning and gouging in tree surgery; caulking joints and seams; scaling tanks; installing signs, fixtures, seats; tamping and vibrating concrete.

No. 30 PORTABLE ELECTRIC HAMMER

Capacity in concrete or brick, $\frac{1}{2}$ "

Number of blows per minute, 2700

Net weight, $5\frac{3}{4}$ lbs.; overall length, $12\frac{7}{8}$ "

Price, complete—(Code No. 102).....\$85.00

No. 32 PORTABLE ELECTRIC HAMMER

Capacity in concrete or brick, $\frac{3}{4}$ "

Number of blows per minute, 2500

Net weight, $9\frac{3}{4}$ lbs.; overall length, $14\frac{5}{8}$ "

Price, complete—(Code No. 103).....\$115.00

No. 34 PORTABLE ELECTRIC HAMMER

Capacity in concrete or brick, $1\frac{1}{8}$ "

Number of blows per minute, 2300

Net weight, 17 lbs.; overall length, $17\frac{3}{8}$ "

Price, complete—(Code No. 104).....\$145.00

No. 36 PORTABLE ELECTRIC HAMMER

Capacity in concrete or brick, 2"

Number of blows per minute, 1950

Net weight, 23 lbs.; overall length, $20\frac{1}{4}$ "

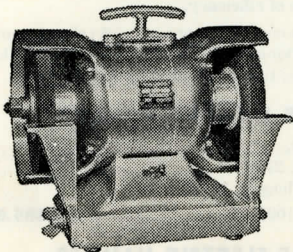
Price, complete—(Code No. 105).....\$195.00

All units available for 110, 220 or 250 volts. Universal Motors.

BALL BEARING ELECTRIC BENCH GRINDERS

All Bench Grinders are equipped with ball bearings, protected from dust and set to minimize spindle vibration; tool rests adjustable for wheel wear; strong wheel guards, completely enclosed except on 6" Junior; wide, sturdy base with rubber feet; carrying handle on all except the 10" units; adjustable spark shield on 8" and 10" Grinders. Grinders can be equipped with eye shields, extended spindles, pedestals; and can be supplied as combination grinders for grinding and wire brushing as listed under each unit. Standard equipment includes two grinding wheels of correct size and grit. Motors are not universal; supplied only for voltages and currents listed under each unit. Spindle no-load speeds are: 25 cycle, 1500 R.P.M.; 40 cycle, 2400 R.P.M.; 50 cycle, 3000 R.P.M.; 60 cycle, 3600 R.P.M.; D.C., 3600 R.P.M.; (except 10" unit, which is 50 cycle, 1500 R.P.M.; 60 cycle, 1800 R.P.M.; D.C., 2000 R.P.M.)

6" JUNIOR BENCH GRINDER



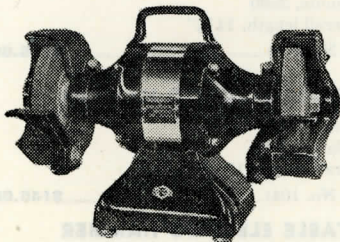
Wheel Size, 6" x $\frac{5}{8}$ " x $\frac{1}{2}$ ";
Net weight, 31 $\frac{1}{2}$ lbs.

Motor Rating, $\frac{1}{4}$ H.P.,
($\frac{1}{5}$ H.P. for 25 cycle).

Price, complete, for
available voltages
and cycles.....**\$22.50**

For all standard A.C.
1-phase volts and cycles
only. Not for D.C.

6" HEAVY DUTY BENCH GRINDER



Wheel Size, 6" x $\frac{3}{4}$ " x $\frac{1}{2}$ ";
Net weight, 45 lbs.

Motor Rating, $\frac{1}{3}$ H.P.

Supplied for 50-60
cycle, 1-phase A.C.
110 or 220 volt only;
and for all D.C. volts
up to 250 volts only.

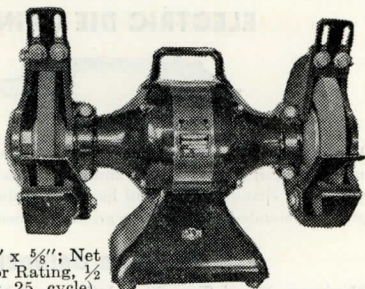
Price, for 50-60 cycle, 1-phase A.C.—(Code No. 67).....**\$38.00**

For all available D.C. currents—(Code No. 68).....**\$42.00**

6" Combination Grinder, with 1 standard grinding wheel and guard;
and 1 extra-wide guard and 6" wire wheel brush.

Available for A.C. only.....**\$41.00**

8" BALL BEARING BENCH GRINDER



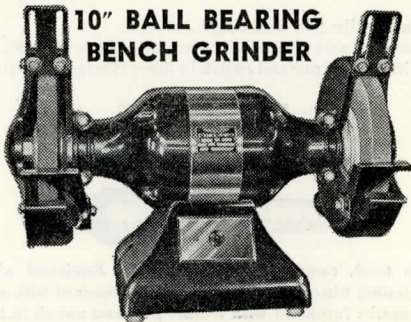
Wheel Size, 8" x $\frac{7}{8}$ " x $\frac{5}{8}$ "; Net weight, 72 lbs. Motor Rating, $\frac{1}{2}$ H.P., ($\frac{1}{3}$ H.P. for 25 cycle).

Motor, Not Universal. Not available for direct current. Supplied in standard voltages and currents as follows:

Voltage.....	110, 220 or 250	440 or 550
Phase.....	1, 2 or 3*	2 or 3*
Cycle.....	25, 40, 50-60	25, 40, 50-60

Price, for all available A.C. currents only.....**\$68.00**
 8" Combination Grinder, equipped with 1 standard grinding wheel and guard; and 1 extra-wide guard and 8" wire wheel brush..**\$72.00**

10" BALL BEARING BENCH GRINDER



Wheel Size, 10" x 1" x $\frac{3}{4}$ "; Net weight, 137 lbs.

Motor Rating, 1 H.P., ($\frac{3}{4}$ H.P. for 25 cycle)

Motor, Not Universal.

Supplied in standard voltages and currents as follows:

Voltage.....	110, 220 or 250	110 or 220	440 or 550
Phase.....	1, 2 or 3*	D.C.	2 or 3*
Cycle.....	25, 40, 50-60		25, 40, 50-60

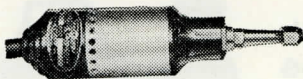
Price, for all available voltages and cycles.....**\$98.00**

10" Combination Grinder, equipped with 1 standard grinding wheel and guard; and 1 extra-wide guard and 10" wire wheel brush.....**\$103.00**

* 3-phase, 110/220 volt and 220/440 volt units are reconnectable for either voltage. All D.C. units, 1-phase and 2-phase units and 250 and 550 volt 3-phase units are for one voltage only.

See Master Catalog for complete voltage, wiring, switch specifications and for Code Numbers where not given above.

ELECTRIC DIE GRINDERS



For die shops, stamping plants, tool rooms; compact, powerful, rugged; equipped with $\frac{1}{4}$ " single purpose chuck adaptable to variety of shaped wheels and burrs. Supplied with either bonnet grip or extended handle. No grinding wheels furnished.

No. 7 DIE GRINDER

Maximum Wheel Size, $2'' \times \frac{1}{2}'' \times \frac{1}{2}''$; No-load Speed, 19,000 R.P.M.

Net weight, $2\frac{1}{2}$ lbs.; overall length, 9"

Price, standard unit with end cap—(Code No. 288).....**\$35.00**

Price, with extended end handle—(Code No. 289).....**\$38.00**

No. 12 DIE GRINDER

Maximum Wheel Size, $2\frac{1}{2}'' \times \frac{1}{2}'' \times \frac{1}{2}''$; No-load Speed, 19,000 R.P.M.

Net weight, 4 lbs.; Overall length, $14\frac{1}{2}''$

Price, standard unit with extended handle—(Code No. 290)..**\$40.00**

Price, with bonnet cap and switch in line—(Code No. 291)..**\$43.00**

PORTABLE GRINDERS



Precision tools, compact, light, versatile. Equipped with high speed grinding wheels and wheel guards. Standard with extended handle; can be furnished with bonnet grip and switch in line.

2" PORTABLE GRINDER

Wheel Size, $2'' \times \frac{1}{2}'' \times \frac{1}{2}''$; No-load Speed, 19,000 R.P.M.

Net weight, $3\frac{1}{2}$ lbs.; overall length, $13\frac{1}{2}''$

Price, standard unit with extended handle—(Code No. 292)..**\$40.00**

Price, with bonnet grip and switch in line—(Code No. 293)..**\$43.00**

$2\frac{1}{2}''$ PORTABLE GRINDER

Wheel Size, $2\frac{1}{2}'' \times \frac{1}{2}'' \times \frac{1}{2}''$; No-load Speed, 19,000 R.P.M.

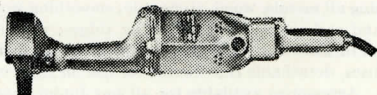
Net weight, $4\frac{1}{2}$ lbs.; overall length, $13\frac{1}{4}''$

Price, standard unit with extended handle—(Code No. 294)..**\$45.00**

Price, with bonnet cap and switch in line—(Code No. 295)..**\$48.00**

All units available for 110, 220 or 250 volts. Universal Motors.

PORTABLE ELECTRIC GRINDERS



Complete line with most advanced features. Splined gear mountings, steel inserts for bearings, welded steel wheel guards; dust-sealed commutators and switches; ball bearings set at spindle ends absorb side thrust; shaped grips and switch handles improve control. All grinders except 8" furnished with correct size grinding wheel.

4" PORTABLE GRINDER

Wheel Size, 4" x $\frac{3}{4}$ " x $\frac{1}{2}$ "; No-load Speed, 4500 R.P.M.

Net weight, 14 lbs.; overall length, 22 $\frac{5}{8}$ "

Price, complete, for all voltages—(Code No. 59).....**\$62.00**

5" PORTABLE GRINDER

Wheel Size, 5" x $\frac{3}{4}$ " x $\frac{1}{2}$ "; No-load Speed, 3800 R.P.M.

Net weight, 16 $\frac{3}{4}$ lbs.; overall length, 23 $\frac{1}{2}$ "

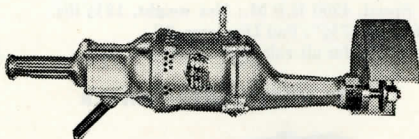
Price, complete, for all voltages—(Code No. 60).....**\$80.00**

6" PORTABLE GRINDER

Wheel Size, 6" x 1" x $\frac{5}{8}$ "; No-load Speed, 3300 R.P.M.

Net weight, 24 $\frac{1}{2}$ lbs.; overall length, 25 $\frac{1}{2}$ "

Price, complete, for all voltages—(Code No. 61).....**\$100.00**



8" PORTABLE GRINDER

Wheel Size, 8" x 1" x $\frac{5}{8}$ "; No wheels furnished with 8" Grinder.

No-load Speed, 4000 R.P.M.

Special Speed—5000 R.P.M.\$3.50 extra

Net weight, 25 $\frac{1}{2}$ lbs.; overall length, 26 $\frac{3}{4}$ "

For use with special bonded wheels on high speed service only.

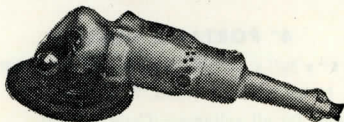
Price, complete, for all voltages—(Code No. 62).....**\$120.00**

All units available for 110, 220 or 250 volts. Universal Motors.

PORTABLE ELECTRIC SANDERS

For surfacing all metals, wood, stone, tile; smoothing welds, removing rust and scale, welding and casting ridges; rubbing lacquer. All Sanders furnished with flexible moulded rubber pads, assorted abrasive discs, detachable side handle for use on right or left hand operation. Accessories available for all but Junior Sander include Wire Cup Brushes, Planer Heads, Saucer Grinding Wheels, Rubbing and Polishing Pads, complete assortment of Sanding Discs. See Master Catalog for detailed listings of Attachments and Accessories.

7" JUNIOR SANDER



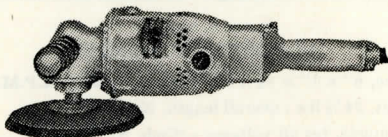
Recommended for light duty, intermittent service only.

No-load Speed, 3200 R.P.M.; Net weight, 7 $\frac{3}{4}$ lbs.

Overall length, 14 $\frac{3}{4}$ "; Pad Diameter, 7"

Price, complete, for all voltages—(Code No. 91).....\$39.50

7" SPECIAL SANDER



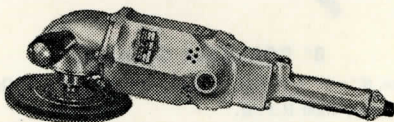
The popular general-purpose Sander for varied shop use.

No-load Speed, 4200 R.P.M.; Net weight, 12 $\frac{1}{2}$ lbs.

Overall length, 17 $\frac{3}{4}$ "; Pad Diameter, 7"

Price, complete, for all voltages—(Code No. 92).....\$53.00

7" HEAVY-DUTY SANDER



Powered and built for constant production surfacing operations.

No-load Speed, 4200 R.P.M.; Net weight, 15 $\frac{1}{4}$ lbs.

Overall length, 18 $\frac{5}{8}$ "; Pad Diameter, 7"

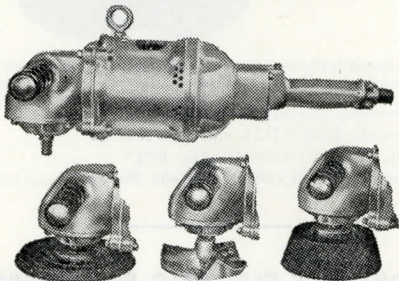
Price, complete, for all voltages—(Code No. 93).....\$75.00

All units available for 110, 220 or 250 volts. Universal Motors.

9" STANDARD SANDER

For intermittent use on operations covering large areas with slower speed. Low spindle speed especially adapted to rubbing, tank and hull cleaning, smoothing and cleaning stone and tile.
No-load Speed, 2700 R.P.M.; Net weight, 15¼ lbs.
Overall length, 18½"; Pad Diameter, 9"
Price, complete, for all voltages—(Code No. 94).....\$78.00

ELECTRIC SURFACER



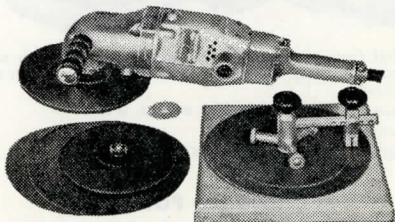
Extra heavy duty unit for constant service under most severe surfacing operations. Specially adapted to saucer grinding wheels, wire cup brush, planer heads and hard sanding work. **Furnished without discs, pads or other attachments.** Optional spindle speeds, to be specified on order.

No-load Speed: 4200 R.P.M. for 7" Sanding and Grinding.
3500 R.P.M. for 9" Sanding and Planing.

Net weight, 21¼ lbs.; overall length, 20"

Price, Surfacers without attachments—(Code No. 95).....	\$105.00
No. 18039—6" Saucer Grinding Wheel.....	\$8.50
No. 18091—7" Flexible Pad and 12 sanding discs.....	\$6.50
No. 18093—9" Flexible Pad and 12 sanding discs.....	\$8.50
No. 14743—Set of 2 Planer Heads.....	\$20.00

7"-9" TWO SPEED SANDER

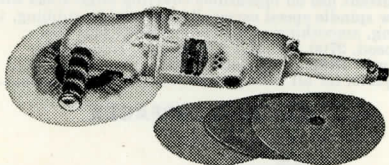


For shops with varied work; intermittent service. Furnished with both 7" and 9" rubber pads, 9" discs and disc trimmer. Gear shift in head quickly changes from high to low spindle speed.
No-load Speeds, 4200 R.P.M. and 2700 R.P.M.

Net weight, 14¾ lbs.; overall length, 19¾"

Price, complete, for all voltages—(Code No. 284).....\$78.00
All units available for 110, 220 or 250 volts. Universal Motors.

COMBINATION SANDER-POLISHER



For shops doing both sanding and polishing in small volume. Gear shift in head quickly changes from high to low spindle speed. Equipped with 7" rubber pad, three sanding discs, 7" lambswool bonnet, reversible side handle.

No-load Speeds, 4200 R.P.M. and 1300 R.P.M.

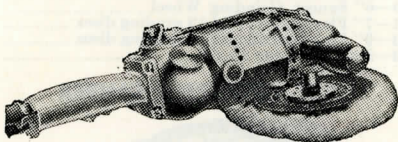
Net weight, 14 $\frac{3}{4}$ lbs.; overall length, 19 $\frac{3}{4}$ "

Price, complete, for all voltages—(Code No. 283).....\$67.00

PORTABLE ELECTRIC POLISHERS

Eliminate hand labor on car polishing and rubbing. Equipped with 7" flexible pad, lambswool pad and lambswool bonnet, reversible side handle. Quickly remove road film and restore new-car lustre. Lectro-Machine Polish cleans and polishes in one operation.

7" AUTOMATIC POLISHER



Polish is fed from reservoir by plunger pump through center of pad. Speeds polishing, with more uniform results; polish does not dry on surface.

No-load Speed, 1600 R.P.M.; Net weight, 9 lbs.

Pad Diameter, 7"

Price, complete, for all voltages—(Code No. 97).....\$65.00

7" STANDARD POLISHER

Ideal for shops with small volume of polishing, and for rubbing down new paint and lacquer. Does not have automatic feed feature.

No-load Speed, 1600 R.P.M.; Net weight, 8 $\frac{1}{2}$ lbs.

Pad Diameter, 7"

Price, complete, for all voltages—(Code No. 96).....\$52.00

All units available for 32, 110, 220 or 250 volts. Universal Motors.

VACKAR—Electric Vacuum Cleaner

Super-powered for rapid cleaning of automobiles; for wash racks, storage garages, used-car dealers. Completely self-contained, hose only is used inside car. Filter deposits dirt in large, easy-to-empty metal base, clean air ventilates motor. Rugged construction, compact, attachments for all types of car cleaning.



Capacity, 42 cu. ft. of air per minute.

Sealed vacuum pull, 40"; vacuum with 1" orifice, 10"

Net weight, 32 lbs.; height, 17"; diameter, 16"

Equipment: 10-foot vacuum hose, wide upholstery nozzle, detachable brush, flat tube nozzle, 20-foot rubber-covered cable.

Price, complete with attachments for all but 32 volts—
(Code No. 98).....

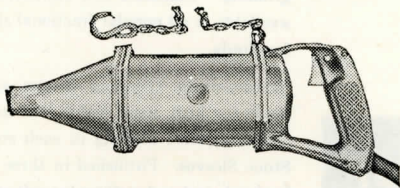
\$75.00

Price, complete with attachments, for 32 volt current.....

\$78.00

Available for 32, 110, 220 or 250 volts. Universal Motor.

ELECTRIC HEAT GUN



Instantaneous, concentrated heat for thawing transmission and differential grease; radiators, pumps, hose; drying ignition, spark plugs, new paint; warming carburetors. 1000-watt Nichrome element, completely enclosed and protected. Six attachments for various drying and blowing operations.

Max. temperature, 450° F.; Air vol., 8 cu. ft. per min.

Net weight, 5 lbs.; overall length, 14 $\frac{7}{8}$ "

Price, complete with all attachments—(Code No. 63).....

\$33.50

ELECTRIC GLUE POT

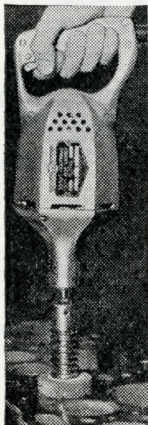
Thermostatic control maintains constant temperature of 150°. Equipped with Nichrome element, sealed against moisture; 2-quart glue container of cast aluminum, machined to fit water pot; carrying handle and brush wiper; cable and plug. Furnished for 110 or 220 volt alternating current only, not for D.C.

Price, complete, for either voltage—(Code No. 89).....

\$19.50

"VIBRO-CENTRIC"

Valve Seat Grinding Method

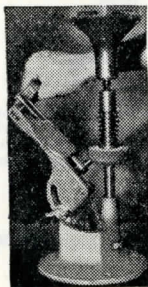


Restores perfect accuracy and mirror-finish to hard steel and stellite valve seat inserts and to cast iron seats. Positive, patented vibrating action in Driver spindle speeds grinding, prevents loading and reduces stone wear. High speed concentric grinding cuts entire circumference of seat at once.

Light-weight Stone Sleeves interchangeable on all Vibro-Centric stones; upper end has hex socket to form universal joint with hex ball on the Driver spindle. Bearings accurately fitted to Self-Centering Pilots.

Self-Centering Pilots cover wide range of under and over sizes, and accurately fit guide to form rigid axis for Vibro-Centric grinding. Standard Self-Centering Pilots available in all popular fractional sizes and for Fords.

Vibro-Centric Grinding Stones specially made for high speed valve seat grinding. Threaded steel bushing in each stone fits Stone Sleeves. Furnished in three grades: for hard steel and stellite; for soft steel and cast iron; and for finish-grinding. Available for 45°, 30° and 20°, and for all popular fractional sizes from 1¼" to 3½".



An accurate, adjustable Dressing Stand cleans and trues Vibro-Centric grinding stones with minimum waste. Micrometer feed takes off just enough to true cutting angle and freshen cutting surface. Diamond point feed arm adjustable for various angles.

See Master Catalog for complete listing of Self-Centering Pilots, Vibro-Centric Stones, Stone Sleeves and Carbon Cleaning Tools.

STANDARD

"VIBRO-CENTRIC"

Valve Seat Grinder

(Illustrated on opposite page)

The ideal outfit for general shops handling average volume of valve reconditioning on popular cars and trucks.

Standard "Vibro-Centric" Driver—Spindle speed, 12,000 R.P.M.

Net weight, 6lbs.; overall length, 12 $\frac{5}{8}$ "

Price, complete, for all voltages—

(Code No. 115).....**\$36.00**

Standard Dressing Stand—Diamond point arm adjustable from flat to 45°. Micrometer feed on Stone Sleeve Mandrel. Stone Capacity—Up to 3"; Net weight, 6 lbs.

Price, complete with diamond

point—(No. 14188).....**\$18.00**

Standard Stone Sleeve—Fits all Vibro-Centric Stones. Bronze bushings accurately fit self-centering pilots.

Price, complete—(No. 14048).....**\$3.50**

HEAVY-DUTY "VIBRO-CENTRIC" Valve Seat Grinder

(Illustrated on this page)

More speed, more power, greater capacity for shops doing valve work on a "production" basis; also for larger valve seats in truck, tractor and Diesel engines.

Heavy Duty "Vibro-Centric" Driver—Spindle Speed, 14,500 R.P.M.

Net weight, 7 $\frac{1}{4}$ lbs.; overall length, 13 $\frac{7}{8}$ "

Price, complete, for all voltages—(Code No. 331).....**\$48.00**

Heavy Duty Dressing Stand—

Adjustable bracket for various stone sizes. Angle adjustment, 0° (flat) to 90° (vertical). Micrometer feed diamond point on dressing arm. Easily read angle indicator.

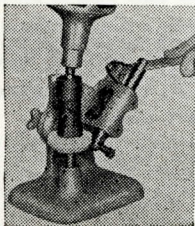
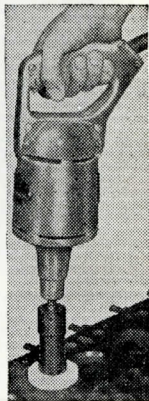
Stone Capacity—Up to 3 $\frac{1}{2}$ "; Net weight, 10 $\frac{1}{4}$ lbs.

Price, complete with diamond

point—(No. 20153).....**\$22.00**

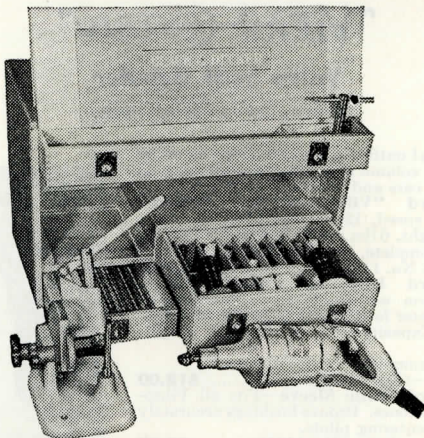
Ball Bearing Stone Sleeve—Minimizes wear, preserves accuracy, gives longer service under constant use. Ball bearings fit pilots.

Price, complete—(No. 19825)**\$10.00**



See Master Catalog for complete listing of Self-Centering Pilots, Vibro-Centric Stones, Stone Sleeves and Accessories.

"VIBRO-CENTRIC" METHOD KITS



Convenient kits provide storage and protection for precision Valve Seat Grinder equipment. Definite space for each item, and additional storage for other hand tools. Strong oak box, natural finish, sturdy hardware and leather handle. Shops specializing in valve work need "Vibro-Centric" kits for complete equipment and protection of tools. Select Kit suited to your needs.

STANDARD BASIC "VIBRO-CENTRIC" KIT

The basis on which to build complete equipment for general shop use.

Includes: 1 Standard Vibro-Centric Driver
1 Standard Stone Dressing Stand
2 Standard Stone Sleeves
1 Standard Kit Box

Price, complete, for all voltages—(Code No. 343).....\$65.00

STANDARD UNIVERSAL "VIBRO-CENTRIC" KIT

Most popular assortment for general service shop and average volume work. Contains all equipment for valve work on popular cars and light trucks.

Includes: 1 Standard Vibro-Centric Driver; 1 Standard Dressing Stand; 2 Standard Stone Sleeves; 5 Self-Centering Pilots (popular sizes); 10 Vibro-Centric Grinding Stones (popular sizes); 1 Standard Kit Box.

Price, complete, for all voltages—(Code No. 117-UN).....\$98.00

HEAVY-DUTY "VIBRO-CENTRIC" KIT (Illustrated)

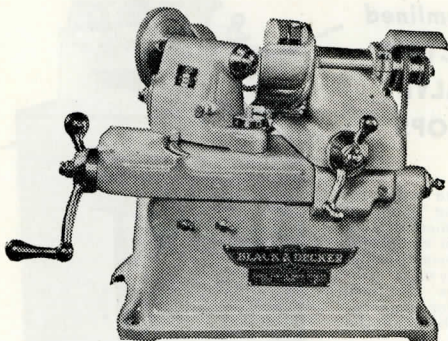
"Last word" in valve seat equipment, for large-volume shops and on larger truck, tractor and Diesel engines. Larger kit box, more capacity; Heavy Duty equipment throughout for wider range of sizes.

Includes: 1 Heavy duty Vibro-Centric Driver; 1 Heavy duty Dressing Stand; 2 Ball Bearing Stone Sleeves; 1 Pilot Turning Wrench; 5 Self-Centering Pilots (up to $\frac{1}{16}$ ""); 15 Vibro-Centric Grinding Stones (up to 3"); 1 Heavy duty Kit Box.

Price, complete, for all voltages—(Code No. 336).....\$137.50

All Kits available for 110, 220 or 250 volts. Universal Motors.
See Master Catalog for detailed Kit Specifications.

SUPER-SERVICE VALVE REFACERS



Precision Valve Grinders combining speed of operation, smooth finish and absolute accuracy in the reconditioned valve face. Two independent universal motors give abundant power; feed screws give lever-feed speed with screw-feed accuracy; 3-point bearing on feed tables gives smooth action; "twin-grip" collet insures accurate alignment of valve face and stem; ball bearing wheel spindle, double-ended to provide for valve stem and rocker arm grinding; universal work head, adaptable to all popular valve angles and stem sizes.

Two types of Super-Service Refacer; Standard (Dry Grinding) Refacer for fast, accurate work in general shops; and new Wet Grinding Refacer for super-smooth finish and greater grinding speed.

At slight extra cost, any unit can be equipped with Micrometer Valve Stem Grinding Attachment for accurate tappet clearance on Ford valves; with Rocker Arm and Breaker Point Grinding Attachments; all of which attach to outer end of wheel spindle.

Capacity: $\frac{9}{16}$ " Refacer (with one collet)— $\frac{9}{32}$ " to $\frac{9}{16}$ "
 $\frac{5}{8}$ " Refacer (with two collets)— $\frac{9}{32}$ " to $1\frac{1}{16}$ "

Angle adjustment, 0° to 90° ; Net weight, 145 lbs.

Price, $\frac{9}{16}$ " Standard Super-Service Refacer—

(Code No. 106).....**\$175.00**

Price, $\frac{5}{8}$ " Standard Super-Service Refacer—

(Code No. 107).....**\$185.00**

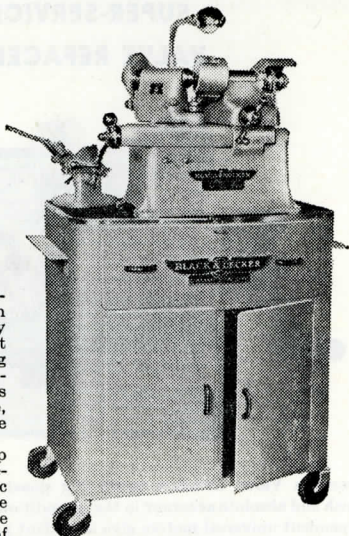
Price, $\frac{9}{16}$ " Wet-Grinding S.S. Refacer—(Code No. 281).....**\$190.00**

Price, $\frac{5}{8}$ " Wet-Grinding S.S. Refacer—(Code No. 282).....**\$200.00**

Available for 110, 220 or 250 volts. Universal Motors.

See Master Catalog for complete list of Attachments.

Streamlined ELECTRIC VALVE SHOPS



A complete valve reconditioning "shop" on wheels. Smart display of precision equipment helps sell reconditioning jobs; sturdy metal cabinet carries all tools necessary for complete, accurate job right at the car.

Roomy cabinet top holds Super-Service Refacer and Vibro-Centric Dressing Stand; large drawer has definite space for each item of Vibro-Centric equipment, including Pilots, Stones and Sleeves, plus carbon cleaning brushes, valve guide cleaners and room for other hand tools; lower storage section for Vibro-Centric Driver and other items such as gaskets, drills, etc. Adjustable lamp for ample light on all operations; four outlets for operating tools and 20-foot extension cord; rubber-tired casters. Available in eight different combinations, adapted to requirements of any shop doing valve work.

STANDARD VALVE SHOP—With Refacer, Standard Universal Vibro-Centric Kit, less box (see page 31), 3 Valve Guide Cleaners, 2 Carbon Cleaning Brushes, 1 Valve Shop Cabinet.

Price, with $\frac{9}{16}$ " Standard Refacer—(Code No. 106-VS).....**\$320.00**

Price, with $\frac{5}{8}$ " Standard Refacer—(Code No. 107-VS).....**\$330.00**

Price, with $\frac{9}{16}$ " Wet-Grinding Refacer—
(Code No. 281-VS).....**\$335.00**

Price, with $\frac{5}{8}$ " Wet-Grinding Refacer—
(Code No. 282-VS).....**\$345.00**

HEAVY DUTY VALVE SHOP—With Refacer, Heavy Duty Vibro-Centric Kit, less box (see page 31), 3 Valve Guide Cleaners, 2 Carbon Cleaning Brushes, 1 Valve Shop Cabinet.

Price, with $\frac{9}{16}$ " Standard Refacer—(Code No. 341-VS).....**\$350.00**

Price, with $\frac{5}{8}$ " Standard Refacer—(Code No. 342-VS).....**\$360.00**

Price, with $\frac{9}{16}$ " Wet-Grinding Refacer—
(Code No. 339-VS).....**\$365.00**

Price, with $\frac{5}{8}$ " Wet-Grinding Refacer—
(Code No. 340-VS).....**\$375.00**

Available for 110, 220 or 250 volts. Universal Motors.

See Master Catalog for complete Specifications and Attachments.

No. 10 VALVE LAPPER

For shops with limited valve work or those desiring to "lap in" valves after reconditioning. Spindle oscillates with long, steady stroke. Equipped with bits of various shapes to fit different style valve heads.

No-load Speed, 500 oscillations per minute.

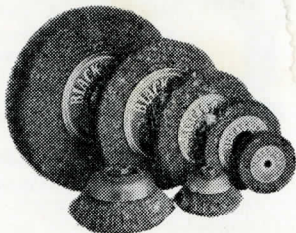
Net weight, 6¼ lbs.; overall length, 14"

Price, complete, for all voltages—(Code No. 118).....\$48.00

Available for 32, 110, 220, or 250 volts. Universal Motor.

WIRE WHEEL BRUSHES

For cleaning, buffing and polishing on castings, moulds, welds, scale and rust, paint, gears and parts. All brushes stoutly built for long service; made of No. 30 W & M gauge wire (.014"). 6" to 12" brushes supplied with standard size hole and one set of arbor bushings of specified size from ⅜" to 1¼", in ⅛" intervals. 4" brush has ⅜" or ½" hole only.



Price, complete with
1 Set of Arbor
Hole Bushings†

Cat. No.	Diam.	Width	
21397	4"*	1¼"	\$1.50
21401	6"	1½"	2.50
21411	7"	1½"	3.25
21405	8"	1½"	3.50
21407	10"	2"	6.00
21409	12"	2"	8.00

†Extra Arbor Hole Bushings, per set of 2.....\$0.25

*½" arbor hole is standard and will be furnished unless ⅜" is specified.

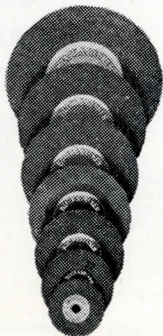
CUP WIRE BRUSHES

No. 18056—4" Cup Wire Brush for Sander or Surfacar.....\$4.00

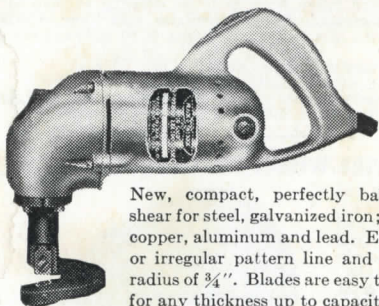
No. 12398—5" Cup Wire Brush for Sander or Surfacar.....\$4.50

GRINDING WHEELS

We are equipped to supply, through our distributors, replacement Grinding Wheels for our Bench Grinders, Portable Grinders, Valve Refacers and Vibro-Centric Valve Seat Grinders; and accessory grinding wheels for use on certain sizes of drills and sanders. The correct grades, grits and sizes are available for all current tools and also for older units on which replacement wheels are required. See Master Catalog for complete listing of Grinding Wheel sizes, grades and prices.



PORTABLE LECTRO-SHEAR



New, compact, perfectly balanced sheet metal shear for steel, galvanized iron; monel and stainless; copper, aluminum and lead. Easily follows straight or irregular pattern line and cuts to a minimum radius of $\frac{3}{4}$ ". Blades are easy to sharpen and adjust for any thickness up to capacity.

No. 18 GAUGE LECTRO-SHEAR

Capacity in steel (U.S. Std.), 18 gauge

Net weight, 6 $\frac{3}{4}$ lbs.; overall length, 11"

Cutting Speed, 2500 strokes per minute.

Price, complete—(Code No. 258).....**\$60.00**

No. 16 GAUGE LECTRO-SHEAR

Capacity in steel (U.S. Std.), 16 gauge

Net weight, 8 lbs.; overall length, 11 $\frac{3}{4}$ "

Cutting Speed, 2500 strokes per minute.

Price, complete—(Code No. 259).....**\$76.00**

Standard Voltage, 110; also for 220 or 250 volts. Universal Motor.



The BLACK & DECKER Mfg. Co.,
Towson, Maryland, U. S. A.

FACTORY SERVICE BRANCHES at 25 Convenient Locations

Albany, N. Y.

Atlanta, Ga.

Boston, Mass.

Buffalo, N. Y.

Chicago, Ill.

Cleveland, Ohio

Dallas, Tex.

Denver, Colo.

Detroit, Mich.

Indianapolis, Ind.

Kansas City, Mo.

Los Angeles, Calif.

Memphis, Tenn.

Minneapolis, Minn.

New Orleans, La.

New York, N. Y.

Oakland, Calif.

Philadelphia, Pa.

Pittsburgh, Pa.

San Francisco, Calif.

Seattle, Wash.

St. Louis, Mo.

Towson, Md.

Sydney, Australia

Toronto & Montreal, Canada

Slough, Bucks., England